

# **RANDOMISED CONTROLLED TRIAL OF SUBTENON'S VERSUS RETROBULBAR ANAESTHESIA IN PHACOTRABECULECTOMY**

## **ABSTRACT**

### **Background and Objectives**

Retrobulbar anaesthesia provides excellent analgesia, akinesia and is used world wide for performing cataract surgery. However, it is rarely associated with devastating complications. Sub-Tenon's anaesthesia is safe method of delivering anaesthesia as it avoids the introduction of sharp needles into the orbit. The objectives of the present study were to evaluate the comparative efficacy and safety of sub-

Tenon's anaesthesia and retrobulbar anaesthesia, during phacotrabeculectomy surgery.

### **Methods**

The present randomized controlled trial was conducted among 200 patients undergoing phacotrabeculectomy surgery at Aravind eye Hospital and postgraduate institute of ophthalmology, madurai from November 2012 to April 2013. The patients were randomly allocated to retrobulbar group (100 patients) and Sub

-Tenon's group (100 patients). The efficacy was measured by akinesia of

extraocular muscles, akinesia of lid, pain assessed during injection, intraoperative and after surgery and complications of retrobulbar and sub-Tenon's block.

## **Results**

Both the techniques achieved complete akinesia at the end of 5 minutes following the administration of anaesthesia. Both the techniques were free from sight or life threatening complications. In Sub-Tenon's anaesthesia the onset of akinesia was faster and statistically significant number of patients achieved complete akinesia in the first five minutes ( $p=0.048$ ). It provided remarkable analgesia from the time of administration till four hours postoperative period. Only minor complications like chemosis and sub-conjunctival haemorrhage occurred.

## **Conclusion**

Sub-Tenon's anaesthesia is as effective as retrobulbar anaesthesia during phacotrabeculectomy.

## **Key Words**

Retrobulbar    Anaesthesia;    Phacotrabeculectomy;    Sub-Tenon's Anaesthesia.